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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,520	03/28/2001	Masato Yonezawa	07977/270001/US4820	5433
26171	7590	03/02/2006		
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER ALEJANDRO MULERO, LUZ L	
			ART UNIT	PAPER NUMBER
			1763	
DATE MAILED: 03/02/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/820,520	YONEZAWA ET AL.	
	Examiner	Art Unit	
	Luz L. Alejandro	1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-14 and 20-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-14 and 20-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's arguments in the communication filed on 12/30/05 are persuasive and, therefore, the finality of that action is withdrawn. Prosecution on the merits of this application is reopened on claims 1-4, 6-14, and 20-34, considered unpatentable for the reasons indicated below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 6-14, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art in view of Izu et al., U.S. Patent 4,410,558 or Sando et al., U.S. Patent 4,479,369.

Admitted prior art shows the invention substantially as claimed including a film formation apparatus comprising: a vacuum chamber; an exhaust means for exhausting the gas from the vacuum chamber to the outside; a first plate electrode 303 for supplying an electric energy inside the chamber; a second grounded electrode 302 opposing the first electrode for supplying the electric energy inside the vacuum chamber and wherein the first electrode is located below said second electrode; supporting means for supporting a substrate 301 opposing the first electrode wherein the substrate is moved in a first direction through the chamber, wherein the substrate is supported between the first and second electrodes, and wherein the substrate is located horizontally and has a substrate surface that is downwardly opposed to the first electrode; an introducing port for gas located between the plate electrode 303 and the substrate wherein the gas is introduced into the chamber in a direction parallel with the first direction; and a transporting means for transporting a flexible substrate including at least one selected from a winding and an unwinding roll (see applicant's description of the roll to roll method at paragraph bridging pages 1 and 2). For a complete description of the claims, see Fig. 3 and its description. Note that with respect to independent claim 10 and the claims that depend from it, the first and second electrodes described above represent the second and first electrodes of these claims.

Admitted prior art does not expressly disclose the claimed exhaust structure, wherein the gas is exhausted from a plurality of openings in the first electrode, the openings being circular and located at constant intervals. Izu et al. discloses an apparatus comprising a gas inlet port 52 located in a position between a moving

substrate 10 and a mesh-like electrode 58, the electrode 58 comprising a plurality of openings through where the gas is exhausted (see, for example, fig. 3 and its description). Additionally, Sando et al. discloses an apparatus comprising a mesh-like exhaust port 58 comprising a plurality of openings through where the gas is exhausted (see, for example, figs. 1-2 and their descriptions). In view of these disclosures, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Admitted prior art so as to comprise the exhaust structure suggested by Izu et al. or Sando et al., because this allows for: a) uniform distribution/exhaustion of the gas, and b) maintain a uniform flow of the gas. With respect to the shape and location of the openings for exhausting the gas, it should be noted that Fig. 3 of the Izu et al. reference shows the openings being circular and located at constant intervals. Furthermore, the particular shape of the openings is a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed openings are significant.

Claims 20-24 and 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art in view of Izu et al., U.S. Patent 4,410,558 or Sando et al., U.S. Patent 4,479,369, as applied to claims 1-4, 6-14, 26-27 above, and further in view of Komino et al., U.S. Patent 6,156,151 or Yamazaki, U.S. Patent 4,808,553.

Note that with respect to independent 30 and the claims that depend from it, the first and second electrodes described above represent the second and first electrodes of these claims.

Admitted prior art, Izu et al., and Sando et al. are applied as above but do not expressly disclose that the apparatus further comprises an abnormal discharge preventing plate between the exhaust means and the electrode and having plurality of openings. Komino et al. discloses a plasma apparatus comprising an exhaust means and a plate 118 having a plurality of openings 118a for preventing discharge (see, figs. 1, 4, 7, 9A, 9B, 10 or 11, and their descriptions). Additionally, Yamazaki discloses a plasma apparatus comprising an exhaust means 14 and a plate 20' comprising a plurality of openings which will prevent abnormal discharge from entering the exhaust means. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Admitted prior art modified by Izu et al. and Sando et al., as to further comprise a plate as claimed because abnormal discharge can be prevented in the exhaust means.

Response to Arguments

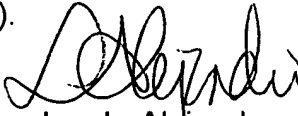
Applicant's arguments, see communication filed on 12/30/05, with respect to the rejection(s) of claim(s) 1-4, 6-14 and 20-34 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection based upon a different interpretation of the previously applied reference has been made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luz L. Alejandro whose telephone number is 571-272-1430. The examiner can normally be reached on Monday to Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Luz L. Alejandro
Primary Examiner
Art Unit 1763

February 27, 2006